



Product Brochure

KTEvolution 12



Robust, Reliable, Reusable

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The KTEvolution 12

Robust, Reliable, Reusable

The KTEvolution 12 is a revolutionary small, portable, weatherproof and washable 'small box' solution to your shipping needs, ensuring longer lifespan, reduced ownership costs, and minimal maintenance expenses.

Engineered to excel in all temperature ranges, our lightweight design guarantees reliable performance, lasting over 96 hours, even under the most demanding conditions using phase changing technology and vacuum insulating panels.

Tested to ISTA7D summer and winter methodologies, the KTEvolution 12 is the ideal choice for handling unanticipated shipping delays with ease. With a robust outer wall section built up from 3 protective layers it is designed for longevity and to protect your products while in transit. The quality of the material used increases the rigidity and robustness of the unit.

Optimised for integrator networks and wholesaler operations, our fully reusable thermal packaging solution ensures high efficiency and minimal CO₂ emissions, making it environmentally friendly.

Designed specifically for last-mile delivery, lab distribution and clinical trials, the KTEvolution 12 enables the safe transport of temperature-sensitive goods, including high-value commercial, clinical trials, and research & development shipments.

The KTEvolution 12 provides unmatched performance, **20- 30% reliable thermal performance increase** over semi-reusable solutions.

Our unique patent-pending PCM pyramid plate system configuration ensures superior product protection and thermal performance, with improved temperature homogeneity across the product even when placed on the side.

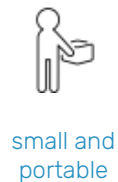
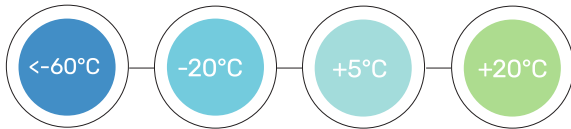
Designed for ease of handling and maintenance, the KTEvolution 12 can be equipped with IoT capabilities for real-time data logging and GPS live tracking, providing customers with full visibility and control over their shipments.

The KTEvolution 12 offers unparalleled customisation advantages, ensuring tailored solutions for your specific needs. From personalised branding, compatibility with all temperature ranges and IoT integration, the KTEvolution 12 can be tailored to meet the unique requirements of your shipments, providing maximum flexibility and efficiency for your business.

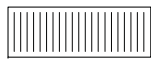


KTEvolution 12 Specifications

96+ hour product protection for -60°C to $+20^{\circ}\text{C}$ ($<76^{\circ}\text{F}$ to $+68^{\circ}\text{F}$) using dry ice or phase changing technology



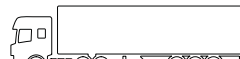
20' container
Fits 704



40' container
Fits 1760



TCV



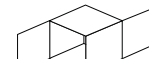
Articulated Lorry



Wide / Narrow bodied



EU Pallet
Fits 24



System Tare
12.5 kg



Volumetric
7.6 kg



Int. Payload
12L

Compatible with commercial vehicles/vans, good vehicles/trucks, narrow and wide bodied aircraft

KTEvolution 12

Key Features

Unique patent-pending PCM pyramid plate system

Ensures superior product protection and thermal performance, with improved temperature homogeneity across the product.

Can be pre-conditioned providing simple load, lock and delivery process

Data Logger

Can be equipped with IoT capabilities for real-time data logging and GPS live tracking, providing customers with full visibility and control over their shipments.

Unparalleled customisation advantages

From personalised branding to adjustable temperature ranges and IoT integration

Superior product protection

Composite construction and foam cushioning in all corners on base of the unit
ASTM4169 assurance level 1 transit tested



One piece inner and fully sealed unit

Easy cleaning, minimal biological contamination, reduced moisture and humidity ingress

Internal Dimensions

L 290 x W 190 x H 220

Internal payload Up to 12 Litres

Euro tote base size

allowing easy automation and easy palletisation

Fully reusable solution providing significant environmental

advantages over disposable and semi-reusable systems

No human or manual intervention required during transit



The KTEvolution 12 is ideally suited for the transportation of

Life Science Products

- All vaccines, including C19 vaccines and ABIs
- API & diagnostic kits
- Biopharmaceutical solutions
- Diagnostics specimen samples
- Cell lines bacteria
- Micro organisms
- Proteins and other samples and solutions
- Clinical trial kits
- Any other product requiring a stable temperature environment for transportation

Designed specifically for last-mile delivery, lab distribution and clinical trials, the KTEvolution 12 enables the safe transport of temperature-sensitive goods, including high-value commercial, clinical trials, and research & development shipments.

Key Evaluation Criteria

- Small, portable, weatherproof and washable
- Fully tailored and adaptable to your temperature, weight and duration needs
- Unparalleled customisation: personalised branding to adjustable temperature ranges and IoT integration
- One KTEvolution 12 is capable of providing $<-60^{\circ}\text{C}$ (ultracold), -20°C (frozen), $+5^{\circ}\text{C}$ (refrigerated) and $+20^{\circ}\text{C}$ (ambient temperature) internal temperature ranges for 96+ hours using dry ice or phase changing technology
- Typically 20-30% reliable thermal performance increase over semi-reusable solutions
- Suitable for International or domestic shipments
- A new addition to our reliable range of pharmaceutical containers. Data downloaded from over 30,000 shipments demonstrated fewer than 0.1% temperature excursions on average
- Easy load and unload process
- No external power or human intervention required during transportation
- Additional security features including physical tamper evidence and lockable options
- Equipped with IoT capabilities for real-time data logging and GPS live tracking, providing customers with full visibility and control over their shipments
- Unique patent-pending PCM pyramid plate system ensuring superior product protection and thermal performance, with improved temperature homogeneity across the product
- Euro tote base size allowing easy automation and easy palletisation
- One piece inner and fully sealed unit to ensure easy cleaning, minimal biological contamination, reduced moisture and humidity ingress
- Tested to ISTA7D summer and winter methodologies
- Longer lifespan, reduced ownership costs, and minimal maintenance expenses
- Optimised for integrator networks and wholesaler operations
- Quality Assured: Thermal performance of every container individually checked and recorded (R value and total heat flux $\text{W}/^{\circ}\text{K}$)
- Certificate of performance for every container
- Easy and quick reconfigure for subsequent shipments
- Global availability through our center of excellence within 24 hours or less
- Superior product protection from the composite construction and foam cushioning in all corners on base of the unit ASTM4169 assurance level 1 transit tested





Why choose Tower?



Robust: Ensuring product integrity for your patients

Tower delivers proven physical and temperature protection for pharmaceutical and life science products. Our containers are designed to perform in all supply chains, regardless of the transport type or environment. The innovative internal and external structural design of our containers means your products will be transported without the need for in-transit manual intervention.



Reliable: Delivering pharmaceuticals to patients when and how they need them.

Data downloaded from over 15,000 shipments has demonstrated fewer than 0.1% temperature excursions on average, a vital indicator in the maintenance of the cold chain. We achieve this by providing a reusable container that delivers the correct performance for every shipment. Our team focuses on delivering a consistent customer outcome whatever the location.



Reusable: Efficient and effective results for our global customers

All parties in the cold chain have a role to play in sustainability. We see ours as providing a reusable, cost-effective solution that contributes to customers' circular supply-chain ambition. Customers value our long-term lease containers and supply-chain flexibility.



Delivering value through customer-focused innovation

Tower incorporates innovation through design to meet the regulatory demands of the pharmaceutical supply chain. Our patented design technology meets the GDP requirements of our customers and All our solutions meet the pharmaceutical industry performance standard, providing a minimum of 120 hours temperature compliance in any environment, anywhere in the world. Performance data demonstrates fewer than 0.1% temperature excursions. Our expert teams work closely with our customers, realising their requirements and how we can address emerging needs. Tower collaborates with stakeholders to identify challenges across a supply chain and to deliver customer-focused innovation.

Product Testing

Tower containers are designed to be used all year round to all destinations using one packaging instruction – avoiding extra levels of complication and uncertainty within either validation or operational control.



Specialist Expertise

Tower is a preferred supplier of temperature-controlled solutions to the global pharmaceutical and life-science industries. Our team of experts understands emerging challenges and needs, and through collaboration with customers, we play a strategic role in optimising supply chains.

We recognise the complexity and challenges of the industry, and we meet this by investing in people. Our customers work with specialists within Tower who understand their supply chains and operate as an extension to their own teams.



Promoting Circularity

Tower cold chain recognise the role we play in working with our stakeholders to move from a linear supply chain to a circular one – providing a solution that supports our mutual ambition of waste reduction through reusability keeping our containers in use for longer reducing the need for disposal and recycling of temperature controlled packaging.

Global availability and support

Our global network uses common processes and standards to deliver consistency for our customers. You will have access to the complete Tower range with a local team of experts to understand specific customer needs. This means we can deliver where and when required.

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AsiaPac

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[Click here to see our global hubs >](#)

